CLINICAL MEDICINE

Image Diagnosis: Nasal Furunculosis— A Dangerous Nose Infection

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CASE PRESENTATION

A five-year-old girl presented to our hospital with fever, pain, and three days of nose swelling and seven days of facial swelling. On examination, there was swelling on her right nasal vestibule with purulent discharge and crusting. There was erythematous swelling on the right side of her face along with preseptal cellulitis of the right eye (Figure 1). A coronal computed tomography scan showed a nasal furuncle and preseptal cellulitis (Figure 2). The culture from the nasal swab grew methicillin-sensitive *Staphylococcus aureus*. Our patient was treated with amoxicillin-clavulante intravenously for three days and orally for seven days, along with topical application of mupirocin ointment for ten days. She recovered completely and was asymptomatic at seven-months' follow-up.

DISCUSSION

Nasal furunculosis is a localized infection of the hair-bearing nasal vestibule. It is usually caused by the bacteria *S aureus*. It can occur as a primary infection or secondary to chronic rhinorrhea, upper respiratory infections, and nose picking. Patients usually present with painful swelling in the vestibule. The skin over the nose becomes tense and red, and a boil may be visible in the nostril. If not treated properly, the patient can develop complications like facial cellulitis and cavernous sinus thrombosis, which is characterized by fever, headache, chemosis, proptosis, and cranial nerve III, IV, V, and VI palsies. ^{1,2}

Treatment for nasal furunculosis should include antistaphylococcal agents such ascloxacillin, cleaning all the crust from the nasal vestibule, cool compresses, and use of antibiotic ointment like mupirocin. ^{1,2} Patients with complications often require hospital admission, drainage of the boil, and intravenous antibiotics. The prognosis is good, and most children resolve without any complications. ❖

Disclosure Statement

The author(s) have no conflicts of interest to disclose.

How to Cite this Article

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Figure 1. A child with right-sided facial swelling, preseptal cellulitis, and crusting and swelling in the right nostril. (Photo used with parental permission.)



Figure 2. Coronal computed tomography scan showing the furuncle (lower arrow) and the preseptal cellulitis (upper arrow).